## Regional HIV/AIDS Epidemiologic Profile of Suffolk County, Massachusetts: 2015

## Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Disease, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2015, this resulted in the removal of 4,401 HIV/AIDS cases, of which 1,021 have died and 3,380 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual risk category was used with the intention of identifying HIV risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. The application of the presumed heterosexual risk category to men is overly inclusive in that woman to man HIV transmission is biologically less probable, and there are alternate risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual risk categories for women.

## Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2014: Suffolk County, Massachusetts<sup>2</sup>

	N	%
People Living with HIV/AIDS	6,218	58%
People Reported with HIV or AIDS who are Deceased	4,538	42%
Total Number of People Reported with HIV Infection or		
AIDS	10,756	100%

<sup>&</sup>lt;sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

## Table 2. Average annual rate of HIV infection diagnosis from 2011 to 2013 and HIV/AIDS prevalence rate on 12/31/14<sup>1</sup>: Suffolk County, Massachusetts<sup>2</sup>

Average annual HIV diagnosis rate from 2011–2013	Average rate per 100,000	Average annual number of HIV diagnoses
Suffolk County, MA	29.1	210.0
Massachusetts Total	10.7	701.3

HIV/AIDS prevalence rate		Number of people
on 12/31/14	Rate per 100,000	living with HIV/AIDS
Suffolk County, MA	861.2	6,218
Massachusetts Total	301.5	19,737

<sup>&</sup>lt;sup>1</sup> The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

<sup>2</sup> Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

<sup>&</sup>lt;sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2004–2013, Suffolk County, Massachusetts<sup>3</sup>

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2004	4,702	91	268
2005	4,903	88	289
2006	5,062	89	248
2007	5,200	78	216
2008	5,333	80	213
2009	5,462	72	201
2010	5,605	71	214
2011	5,762	63	220
2012	5,892	67	197
2013	6,058	47	213

<sup>&</sup>lt;sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Table 4. People diagnosed with HIV infection from 2011–2013<sup>1</sup> and people living with HIV/AIDS on December 31, 2014 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Suffolk County, Massachusetts<sup>2</sup>

	HIV Infection Diagr	noses	PLWH/A	
Gender:	N	%	N	%
Male	500	79%	4,755	76%
Female	130	21%	1,463	24%
Place of Birth:	N	%	N	%
US	374	59%	4,116	66%
Puerto Rico/US Dependency <sup>3</sup>	28	4%	370	6%
Non-US	228	36%	1,732	28%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	198	31%	2,434	39%
Black (non-Hispanic)	220	35%	2,362	38%
Hispanic/Latino	182	29%	1,280	21%
Asian/Pacific Islander	18	3%	95	2%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	324	51%	3,018	49%
Injection Drug Use (IDU)	33 <sup>7</sup>	5%	754	12%
MSM/IDU		<b></b> <sup>7</sup>	211	3%
Heterosexual Sex	54	9%	756	12%
Other	<b></b> <sup>7</sup>	<b></b> <sup>7</sup>	104	2%
Total Undetermined	198	31%	1,375	22%
Presumed Heterosexual Sex <sup>4</sup>	68	11%	518	8%
Undetermined <sup>5</sup>	130	21%	857	14%
Age:	N	%	N	%
	At Diagnosis		On December 31	
Under 13	3	<1%	8	<1%
13 to 19	22	3%	26	<1%
20 to 24	78	12%	88	1%
25 to 29	87	14%	203	3%
30 to 34	86	14%	303	5%
35 to 39	68	11%	408	7%
40 to 44	83	13%	561	9%
45 to 49	78	12%	996	16%
50 to 54	55	9%	1,236	20%
55 to 59	36	6%	1,118	18%
60+	34	5%	1,271	20%
Total <sup>6</sup>	630	100%	6,218	100%

<sup>1</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

<sup>&</sup>lt;sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>3</sup> Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands.

<sup>&</sup>lt;sup>4</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>5</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>&</sup>lt;sup>6</sup> Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>&</sup>lt;sup>7</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Table 5. People living with HIV/AIDS on December 31, 2014 by gender and race/ethnicity: Suffolk County, Massachusetts<sup>1</sup>

	Male	Female		
Race/Ethnicity:	N %		N	%
White (non-Hispanic)	2,254	47%	180	12%
Black (non-Hispanic)	1,417	30%	945	65%
Hispanic/Latino	970	20%	310	21%
Asian/Pacific Islander	78	2%	17	1%
Total <sup>2</sup>	4,755	100%	1,463	100%

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Table 6. People living with HIV/AIDS on December 31, 2014 by gender and exposure mode: Suffolk County, Massachusetts<sup>1</sup>

	Male		Female		
Exposure Mode:	N	%	N	%	
Male-to-male sex (MSM)	3,018	63%	N/A	N/A	
Injection drug use (IDU)	484	10%	270	18%	
MSM/IDU	211	4%	N/A	N/A	
Heterosexual sex	242	5%	514	35%	
Other	56	1%	48	3%	
Total Undetermined	744	16%	631	43%	
<ul> <li>Presumed heterosexual sex<sup>2</sup></li> </ul>	N/A	N/A	518	35%	
<ul> <li>Undetermined<sup>3</sup></li> </ul>	744	16%	113	8%	
Total	4,755	100%	1,463	100%	

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of

<sup>&</sup>lt;sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>&</sup>lt;sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Suffolk County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>

	Male	Male		Male Female			
	N	%	N	%	Total		
				<b></b> /	200		
2004	202	75%	66	25%	268		
2005	224	78%	65	22%	289		
2006	195	79%	53	21%	248		
2007	174	81%	42	19%	216		
2008	176	83%	37	17%	213		
2009	160	80%	41	20%	201		
2010	153	71%	61	29%	214		
2011	168	76%	52	24%	220		
2012	168	85%	29	15%	197		
2013	164	77%	49	23%	213		

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Suffolk County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>

	White Non-Hi	spanic	Black Non-Hispanic		Hispanic/La	atino	Total <sup>3</sup>
	N	%	N	%	N	%	N
2004	88	33%	120	45%	55	21%	268
2005	103	36%	110	38%	73	25%	289
2006	93	38%	97	39%	51	21%	248
2007	93	43%	76	35%	39	18%	216
2008	87	41%	83	39%	38	18%	213
2009	70	35%	86	43%	44	22%	201
2010	79	37%	78	36%	49	23%	214
2011	61	28%	100	45%	47	21%	220
2012	70	36%	52	26%	63	32%	197
2013	67	31%	68	32%	72	34%	213

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source. MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

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<sup>&</sup>lt;sup>3</sup> Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Suffolk County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>

	US		Puerto I US Depen	•	Non-U	S	Total
	N	%	N	%	N	%	N
2004	172	64%	12	4%	84	31%	268
2005	187	65%	19	7%	83	29%	289
2006	152	61%	11	4%	85	34%	248
2007	142	66%	9	4%	65	30%	216
2008	140	66%	11	5%	62	29%	213
2009	132	66%	14	7%	55	27%	201
2010	133	62%	8	4%	73	34%	214
2011	138	63%	9	4%	73	33%	220
2012	113	57%	11	6%	73	37%	197
2013	123	58%	8	4%	82	38%	213

Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for

the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Ninety-eight percent of people living with HIV/AIDS in MA who were born in a US dependency were born in Puerto Rico, 2% were born in US minor outlying areas ,<1% were born in the US Virgin Islands, and <1% were born in Guam.

4 Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values

may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Suffolk County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>

	MS	M	ID	U	MS ID		HT	SX	Oth	er	Pre HTS			eter- ned <sup>4</sup>	Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2004 2005 2006 2007 2008 2009	120 150 121 113 105 98	45% 52% 49% 52% 49% 49%	28 21 17 22 11	10% 7% 7% 10% 5% 5%	5 -5 -5 -5 -5 -5	5 -5 -5 -5 -5 -5 -5	29 30 32 15 22 23	11% 10% 13% 7% 10% 11%	.5 .5 .5 .5 .5 .5	5 -5 -5 -5 -5 -5	36 28 26 15 15	13% 10% 10% 7% 7% 10%	45 49 39 41 46 45	17% 17% 16% 19% 22%	268 289 248 216 213 201
2010 2011 2012 2013	107 103 113 108	50% 47% 57% 51%	15 14 10 9	7% 6% 5% 4%	<sup>5</sup> <sup>5</sup> <sup>5</sup>	5 5 5	21 28 17 9	10% 13% 9% 4%	_5 _5 _5 _5	5 5 5	32 21 13 34	15% 10% 7% 16%	33 44 34 52	15% 20% 17% 24%	214 220 197 213

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/15

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>&</sup>lt;sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be

suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Suffolk County, Massachusetts<sup>1</sup>, 2004–2013<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2004	85	268	32%
2005	92	289	32%
2006	85	248	34%
2007	67	216	31%
2008	57	213	27%
2009	53	201	26%
2010	57	214	27%
2011	65	220	30%
2012	52	197	26%
2013	57	213	27%

<sup>&</sup>lt;sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>&</sup>lt;sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999. Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/15

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Suffolk County, Massachusetts, <sup>1</sup> 2011–2013<sup>2</sup>

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male Female	136 38	500 130	27% 29%
Race/Ethnicity:	N	N	%
White (non-Hispanic) Black (non-Hispanic) Hispanic/Latino Asian/Pacific Islander Other/Undetermined <sup>3</sup>	44 77 45 <sup>5</sup> <sup>5</sup>	198 220 182 <sup>5</sup> <sup>5</sup>	22% 35% 25% <sup>5</sup> <sup>5</sup>
Place of Birth:	N	N	%
US Puerto Rico/US Dependencies <sup>4</sup> Non-US <b>Total</b>	83 8 83 <b>174</b>	374 28 228 <b>630</b>	22% 29% 36% <b>28%</b>

Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of

before being reported in Massachusetts.

Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999. <sup>3</sup> Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>&</sup>lt;sup>4</sup> Ninety-nine percent of people diagnosed with HIV infection from 2011–2013 who were born in a US dependency were born in Puerto Rico, <1% were born in the US Virgin Islands. <sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional

values may be suppressed to prevent back calculation.